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DETAILED ACTION

Claims 1-33 have been pending for examination.

Claims 1-24 are rejected.

Claims 25-33 withdrawn as being non-elected .

Election/Restrictions

During a telephone conversation with Patrick R. Roche on December 17, 2007, a provisional election was made without traverse to prosecute the claims 1-24. Affirmation of this election must be made by applicant in replying to this Office action. Claims 25-33 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Specification

1. The disclosure is objected to because of the following informalities:
2. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are misspelled, making it not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some misspelled terms used in the specification are: "service" in claim 1, "acceped" in claim 7, "methos" in claim 8, "billinb" in claim 13, "weherin" in claims 14 and 16, "cahracteristics" in claim 18, "serivces" in claim 23. Examiner assumes corrections in ***bold italic*** in examined claims
3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

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4. The disclosure is objected to because it contains an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code. See MPEP § 608.01. Hyperlink “<http://java.sun.com/j2ee/provisioning/industry.html>” appears on page 25, paragraph [0094].

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-11, 16, 17, and 19-24 are rejected under 35 U.S.C. 102(e) as being anticipated by US 7 003 560, Mullen et al.

7. As per claim 1, Mullen teaches an add-on component service subscription method comprising:

providing a device model agent (DMA) including a ***service*** manager, the DMA and service manager being in communication with a device for which the DMA provides at least one service (Column 42, lines 43-48, where the event/data generation services interact with all the managed components);

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- checking in with a services host to see if new transactions are waiting for the device (Column 42, lines 52-54, where the service performs several functions related to the managed device); and
- if a new transaction awaits the device, notifying a device user (Column 42, lines 57-63, where the system notifies a user if the predetermined event thresholds are exceeded).
8. As per claim 2, Mullen teaches the method of claim 1 wherein checking in occurs on a periodic basis (Column 42, lines 14-22, where the core management often polls the event/data generators for information, such as on a time of day basis).
9. As per claim 3, Mullen teaches the method of claim 1 wherein a user can initiate checking in (Column 27, lines 38-41, where automated or manual processes can be used to collect metadata from the database management system).
10. As per claim 4, Mullen teaches the method of claim 1 further comprising providing user selection elements including an acceptance element (Column 28, lines 55-58, where the distribution is created through a point and click interface, inherently requiring a user selection through the interface).
11. As per claim 5, Mullen teaches the method of claim 4 further comprising, in response to user selection of the acceptance element, creating an acceptance transaction to send to the services host (Column 28, lines 55-63, where the distribution is created though a point and click interface, the creation inherently creating a transaction to create a distribution from the user selection and acceptance).
12. As per claim 6, Mullen teaches the method of claim 1 further comprising providing a user interface (UI) including an upgrade status screen (Column 28, lines 55-

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59, where the distribution is created by selecting the files and scripts through a user interface, which serves as a status screen for the device).

13. As per claim 7, Mullen teaches The method of claim 5 wherein the new transaction is a new software transaction and the method further comprises receiving the *accepted* new software, installing the accepted new software, and rebooting the system hosting the accepted new software (Column 29, lines 5-14, where the distribution employs a pull install strategy that downloads pending updates from a server and forces user log-off to install updates).

14. As per claim 8, Mullen teaches the *method* of claim 7 further comprising saving software that is being upgraded (Column 29, lines 22-35, where the distribution involves staging, where two copies of data reside on the machine with only one in use until the cross over date, showing that the data is saved on the updating machine).

15. As per claim 9, Mullen teaches the method of claim 1 wherein checking in comprises encrypting communications (Column 37, lines 7-16, where the security services include cryptographic tools for public key encryption).

16. As per claim 10, Mullen teaches a service provision method comprising:
providing at least one core service (Column 41, lines 62-67, where the operations architecture consists of different tools which supply services such as core management and event generation);
providing a DMA including a service manager (abstract, where the computing system includes a plurality of management tools);
providing a services layer in which services can run (Column 21, lines 30-36, where the management tools define and manage levels of service); and

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providing a communications medium which the service manager can use to communicate with a services host (Figure 2A, where the system is connected through a network).

17. As per claim 11, Mullen teaches the method of claim 10 wherein providing at least one core service comprises providing at least one diagnostic routine (Column 31, lines 62-67, where the fault and recovery management tools include diagnostic tools).

18. As per claim 16, Mullen teaches the method of claim 10 *wherein* providing at least one core service comprises providing a remote monitoring service (Column 3, lines 27-34, where the monitoring and tuning tool monitors applications and devices connected to the warehouse system).

19. As per claim 17, Mullen teaches the method or claim 16 wherein the remote monitoring service is a subscribed service that periodically performs a method comprising gathering a configurable set of data, modeling the data, and sending the data to the services host for monitoring (Column 15, lines 51-67, where the analysis and design tools are used to capture, analyze, and prioritize the requirements of the application and transform them into a definition suitable for construction and modeling).

20. As per claim 19, Mullen teaches the method of claim 10 wherein the at least one set of core services comprises at least one maintenance service (Column 15, lines 48-51, where the system building tools are used to maintain and monitor applications used).

21. As per claim 20, Mullen teaches the method of claim 19 wherein the at least one maintenance service comprises a DMA housekeeping service (Column 15, lines 48-51, where the system building tools are used to maintain and monitor applications used on the warehouse system).

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22. As per claim 21, Mullen teaches the method of claim 19 wherein the at least one maintenance service comprises a device health monitor service (Column 13, line 64 to column 14, line 2, where the quality function development tools monitor for reliability, usability, and efficiency of the device).

23. As per claim 22, Mullen teaches the method of claim 19 wherein the at least one maintenance service comprises a DMA to IOT communication status monitor service (Column 31, lines 62-67, where the fault management and recovery management tools monitor and report on network traffic).

24. As per claim 23, Mullen teaches the method of claim 19 wherein the at least one maintenance service comprises a services synchronization service that periodically checks back with a *services* host to see if there are new instructions or activities the DMA should be doing (Column 3, lines 44-55, also column 39, lines 32-48, where the production control application controls and synchronizes events).

25. As per claim 24, Mullen teaches the method of claim 10 further comprising providing a transaction log accessible to a user for inspection of messages sent from the device (Column 29, line 65 to column 30, line 9, where the software distribution tool is capable of reporting errors in a log file and sending messages to an administrator).

Claim Rejections - 35 USC § 103

26. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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27. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

28. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

29. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7 003 560, Mullen et al as applied to claim 10 above, and further in view of US 7 123 608, Scott et al.

30. As per claim 12, Mullen teaches the method of claim 10.

Mullen does not teach an explicit billing utility. He does teach a license management tool, which provides license reports for client program usage (Column 33, line 66 to column 34, line 10). Scott teaches a system for managing database service that provides service modules and services:

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wherein providing at least one core service comprises providing an automatic billing service (Column 110, lines 1-8, where the account records keep real-time billing information).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include billing service such as that taught by Scott in the management system as taught by Mullen. Mullen teaches that the management system can keep track of program usage and licensing reports, and that those statistics can be used to save money for a company (Column 33, line 66 to column 34, line 10). Scott's billing system would further automate the process, making it more efficient and simpler, by including a billing service that could charge for the license usage collected in Mullen's management system.

31. As per claim 13, the combination of Mullen and Scott teaches the method of claim 12 wherein the automatic ***billing*** service is a subscribed service that reports at least one billing meter to the services host (Column 110, lines 1-8, where the account record serves as a billing meter).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include billing service such as that taught by Scott in the management system as taught by Mullen. Mullen teaches that the management system can keep track of program usage and licensing reports, and that those statistics can be used to save money for a company (Column 33, line 66 to column 34, line 10). Scott's billing system would further automate the process, making it more efficient and simpler, by including a billing service that could charge for the license usage collected in Mullen's management system.

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32. Claims 14, 15, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7 003 560, Mullen et al as applied to claim 10 and 17 above, and further in view of US 2002/0047839, Miida et al.

33. As per claim 14, Mullen teaches the method of claim 10.

Mullen does not teach a specific supply replenishment system, but does teach that the system manages print services (Column 39, lines 49-56). Miida teaches a system for collecting and providing information, such that the system provides a core service for collecting information (abstract, where the service sends the status information):

wherein providing at least one core service comprises providing a supplies replenishment service (Page 11, paragraph [0274], where the message is regarding expendable supplies, such as toner).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a supply manager such as that taught by Miida in a management system such as that taught by Mullen. The supply manager taught by Miida provides benefits to the user, as it provides a message to the user of the remaining life of the printer toner, so that purchases and replacements can be made as necessary (Miida, abstract). This would be beneficial in any computer system, as it would allow for greater system efficiency and convenience to the user (Miida, Page 2, paragraph [0040]). This manager would be beneficial in the system taught by Mullen, as it would allow the management system to oversee another aspect of the network.

34. As per claim 15, the combination of Mullen and Miida teaches the method of claim 14 wherein the supplies replenishment service is a subscribed service that tracks at least one of toner usage, area coverage, and toner bottle change events to ensure timely

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and accurate delivery of supplies to the user (Page 11, paragraph [0274], where the message is regarding expendable supplies, such as toner).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a supply manager such as that taught by Miida in a management system such as that taught by Mullen. The supply manager taught by Miida provides benefits to the user, as it provides a message to the user of the remaining life of the printer toner, so that purchases and replacements can be made as necessary (Miida, abstract). This would be beneficial in any computer system, as it would allow for greater system efficiency and convenience to the user (Miida, Page 2, paragraph [0040]). This manager would be beneficial in the system taught by Mullen, as it would allow the management system to oversee another aspect of the network.

35. As per claim 18, Mullen teaches the method of claim 17.

Mullen does not teach a specific supply replenishment system, but does teach that the system manages print services (Column 39, lines 49-56). Miida teaches a system for collecting and providing information, such that the system provides a core service for collecting information (abstract, where the service sends the status information):

wherein the set of data comprises at least one of billing meters, IOT faults, media path jams, image area coverage, *characteristics* of media used, feature usage, toner status, simplex/duplex quantities, media tray usage, reduction and enlargement, copy modes, and High-Frequency Service Items status (Page 11, paragraph [0274], where the message is regarding expendable supplies, such as toner).

It would have been obvious to one of ordinary skill in the art at the time of the invention to include a supply manager such as that taught by Miida in a management system such

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as that taught by Mullen. The supply manager taught by Miida provides benefits to the user, as it provides a message to the user of the remaining life of the printer toner, so that purchases and replacements can be made as necessary (Miida, abstract). This would be beneficial in any computer system, as it would allow for greater system efficiency and convenience to the user (Miida, Page 2, paragraph [0040]). This manager would be beneficial in the system taught by Mullen, as it would allow the management system to oversee another aspect of the network.

Conclusion

36. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 7 219 124, Cerami et al teaches a system and method for provisioning and providing services to devices.

US 2003/0005091, Ullmann et al teaches a method and apparatus for improved network monitoring by a service manager.

US 7 260 623, Wookey et al teaches a remote service system with device diagnostics and software updates.

US 7 240 109, Wookey et al teaches a remote service system interface.

US 2003/0051041, Kalavade et al teaches a method and apparatus for integrating billing and authentication services.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS RICHARDSON whose telephone number is (571)270-1191. The examiner can normally be reached on Monday through Thursday, 8am-5pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Taghi Arani can be reached on (571) 272-3787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TR

/Taghi T. Arani/
Supervisory Patent Examiner, Art Unit 4121
12/17/2007